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EXAMINER

CHEVALIER, ALICIA ANN

ART UNIT	PAPER NUMBER
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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Paper No. 29

Application Number: 09/319,142
Filing Date: July 29, 1999
Appellant(s): WINTER ET AL.

Robert W. Becker
For Appellant

MAILED
JAN 14 2002
GROUP 1700

EXAMINER'S ANSWER

This is in response to the appeal brief filed October 21, 2002.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

Art Unit: 1772

(2) *Related Appeals and Interferences*

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is incorrect. A correct statement of the status of the claims is as follows:

Claims 16-32 are pending in the application.

This appeal involves claims 16-31.

Claim 32 is withdrawn from consideration as not directed to the elected article claims, see paper #17.

(4) *Status of Amendments After Final*

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

(6) *Issues*

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

Appellant's statement that the claims stand or fall together is acknowledge.

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

5,882,786	Nassau et al.	03-1999
5,431,028	Lampert et al.	07-1995
2,521,846	Gregory	09-1950

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

1. Claims 16-18, 20, 22-27 and 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nassau et al. (5,882,786) in view of Gregory (2,521,846).

Nassau et al. discloses synthetic gemstones which are produced by growing single crystals of silicon carbide, fashioning the silicon carbide into gemstone cores, and thereafter depositing a thin coating of diamond on the core. See abstract. The color of the diamond coating may be achieved by doping. See column 4, lines 11-39. The table of the silicon carbide

Art Unit: 1772

gemstone core may be formed parallel to the basal plane since this orientation simplifies the production process, or it may be oriented so that the diamond deposition occurs on the carbon face instead of the silicon face, thereby facilitating the initial nucleation and uniformity of the diamond coating. See column 5, lines 12-27.

In claim 27, the limitation that the grain boundaries of the precious stone layer are aligned in a column shape is rejected as an inherent property. Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a *prima facie* case of either anticipation or obviousness has been established. MPEP 2112.01.

Nassua et al., however, fail to disclose a plate-shaped support having a surface with at least one pyramid-shaped depression.

Gregory teaches a composite glass and metal article with internal fractures forming light-reflecting facets and surfaces imparting gem-like or jewel-like properties. See column 1, lines 1-8. The flat metal vessels, which would appear to be inherently a hard metal, may have pyramid-shaped recesses forming geometric extensions of the sheet proper. See figures 10 and 11 and column 4, lines 1-7.

It would have been obvious to use the tray taught by Gregory with the synthetic gemstones taught by Nassau et al if a superior tray with gem-like properties was sought. One would have been motivated by reasonable expectation of success because both inventions involve the creation of gem-like articles.

Process limitations are given little or no patentable weight. The method of forming the product is not germane to the issue of patentability of the product itself. Further, when the prior

Art Unit: 1772

art discloses a product which reasonably appears to be either identical with or only slightly different than a product claim in a product-by-process claim, the burden is on the Applicant to present evidence from which the Examiner could reasonably conclude that the claimed product differs in kind from those of the prior art. *In re Brown*, 459 F.2d 531, 173 USPQ 685 (CCPA 1972); *In re Fessman*, 489 F.2d 742, 180 USPQ 324 (CCPA 1974). This burden is NOT discharged solely because the product was derived from a process not known to the prior art. *In re Fessman*, 489 F.2d 742, 180 USPQ 324 (CCPA 1974).

Furthermore, the determination of patentability for a product-by-process claim is based on the product itself and not on the method of production. If the product in the product-by-process claim is the same or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 946, 966 (Fed. Cir. 1985) and MPEP §2113. In this case, the method by which the pyramid-shaped depression is formed does not render the products of claims 22-24 and 29 patentably distinct from the prior art.

It is well settled that a particular shape of a prior invention carries no patentable weight unless the applicant can demonstrate that the new shape provides significant unforeseen improvements to the invention. See *In re Seid*, 161 F.2d 229, 73 USPQ 431 (CCPA 1947) (Claim was directed to an advertising display device comprising a bottle and a hollow member in the shape of a human figure from the waist up which was adapted to fit over and cover the neck of the bottle, wherein the hollow member and the bottle together give the impression of a human body. Appellant argued that certain limitations in the upper part of the body, including the arrangement of the arms, were not taught by the prior art. The court found that matters relating

Art Unit: 1772

to ornamentation only which have no mechanical function cannot be relied upon to patentably distinguish the claimed invention from the prior art.) Also, see *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966) (the court held that the configuration of the claimed disposable plastic nursing container was a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration of the claimed container was significant.) In the instant case, the application does not indicate any new, significant attributes of the invention due to its shape which would have been unforeseen to one of ordinary skill in the art.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to change the orientation of the silicon wafer in order to change the light reflecting properties of the wafer, to change the angle of the pyramid shaped depression in order to change the light reflecting properties caused by the reflection or to change the shape of the support to be curved for aesthetic purposes. One skilled in the art would have been motivated to do so in order to manipulate the shape for any specific intended use.

2. Claims 19, 21 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nassau et al. (5,882,786) in view of Gregory (2,521,846) as applied to claims 16-18, 20, 22-27 and 29-31 above, and further in view of Lampert et al. (5,431,028).

Nassau et al. and Gregory disclose generally all that is claimed except where the support is comprised of a precious metal and the pyramid shaped depressions have mirror surfaces.

Lampert et al. teaches a metal jewelry article with one or more artificial diamond baguettes formed therein and where faceted reflective surfaces are angled and positioned to reflect light in a manner which simulates a diamond. See abstract. The jewelry article is formed

Art Unit: 1772

of a precious metal that has reflective surfaces. See column 4, lines 1-16. Lampert et al. further teach that the choice of metal and size of indentions and faceted surfaces may be changed to suit the desired end use. See column 1, line 56 to column 2, line 2.

It would have been obvious for one of ordinary skill in the art to substitute a refractive metal for the precious metal used in Lampert for aesthetic purposes.

It would have been obvious for one of ordinary skill in the art at the time of the invention to incorporate the use of the metal jewelry article made of precious metal with reflective surfaces with the gem-like articles taught by Nassau et al. and Gregory because the reflective surfaces cause artificial diamonds to look more authentic. One would have had a reasonable expectation of success because gem-like articles are frequently used in metal jewelry articles.

(11) Response to Argument

3. Appellant argues that the rejection of the claims under 35 U.S.C. 103 cannot be maintained because none of the cited reference in combination remotely suggest to the practitioner the use of a support having a large surface area with pyramid-shaped depressions onto which the precious stone layer is applies via vapor phase deposition, as defined in claim 16.

In response to Appellant's piecemeal analysis of the references, it has been held that one cannot show non-obviousness by attacking references individually where, as here, the rejections are based on combinations of references. *In re Keller*, 208 USPQ 871 (CCPA 1981).

Appellant specifically argues that Nassau et al. imparts no decorative characteristics to the silicon carbide gemstone, nor is any intention of imparting decorative features to the gemstone disclosed or implied in Nassau. Furthermore, that any light reflecting or decorative

Art Unit: 1772

characteristics of the Nassau gemstone are the result of grinding or polishing the silicon carbide stone. As pointed out in the above rejection; “The color of the diamond coating may be achieved by doping. See (Nassau) column 4, lines 11-39.” The color achieved in Nassau’s gemstone is a light reflective decorative characteristic of the gemstone. The concept of adding a wide variety of colors to Nassau’s gemstone is further illustrated in column 3, lines 40-52.

Appellant argues that Gregory neither discloses nor suggests the use of a vapor phase deposition in an extremely thin layer onto a large-surface area support with pyramid-shaped depressions to impart decorative, light reflecting qualities. First, the limitation vapor phase deposition with an “extremely thin layer onto a large-surface area support” is not stated in the claims. Second, the Gregory reference was not relied upon to teach the limitation of the vapor phase deposit layer. Non-obviousness cannot be shown by attacking references individually where, as here, the rejections are based on combinations of references. The Gregory reference was solely relied on to teach the plate-shaped support.

Appellant argues that Lampert fails to provide or even suggest the plurality of pyramid shaped depressions on a large-surface area support and the application of a precious stone layer onto this support by vapor phase deposition. Once again, non-obviousness cannot be shown by attacking references individually where, as here, the rejections are based on combinations of references. The Lampert reference was not used to show the limitations of the plurality of pyramid shaped depressions on a support and the application of a precious stone layer onto this support by vapor phase deposition. The Lampert reference was solely used to show the support plate made of a precious metal and the pyramid shaped depressions have mirror surfaces.

Appellant further argues that the present invention provides a drastic improvement over the stone disclosed in the cited references by providing unexpected and surprising results: with a thin surface-shaped synthetic gemstone layer, superior light-reflecting qualities are obtained, especially since the pyramid-shaped depressions are disposed beneath the stone when it is placed on the support. The limitation “a thin surface-shaped synthetic gemstone layer” is not stated in the claims. Furthermore, Attorney argument is not evidence unless it is an admission, in which case, an examiner may use the admission in making a rejection. See MPEP § 2129 and § 2144.03 for a discussion of admissions as prior art. The arguments of counsel cannot take the place of evidence in the record. *In re Schulze*, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965); *In re Geisler*, 116 F.3d 1465, 43 USPQ2d 1362 (Fed. Cir. 1997) (“An assertion of what seems to follow from common experience is just attorney argument and not the kind of factual evidence that is required to rebut a prima facie case of obviousness.”). See MPEP § 716.01(c) for examples of attorney statements which are not evidence and which must be supported by an appropriate affidavit or declaration.

Appellant further argues that the cited combination of references does not teach or suggest all the claim limitations of the main claim 16, nor does the combination contemplate (i.e., “suggest the desirability of”) further modifications that would lead to the present invention, as argued above. In view of the above arguments the examiner disagrees with Appellant’s assessment that the combination of references does not teach or suggest all the claim limitations of the main claim 16. In response to Appellant’s argument that there is not suggestion to modify the references, the Examiner recognizes that references cannot be arbitrarily combined and that there must be some reason why one skilled in the art would be motivated to make the proposed

Art Unit: 1772

combination of primary and secondary references. *In re Nomiya*, 184 USPQ 607 (CCPA 1975).

However, there is no requirement that a motivation to make the modification be expressly articulated. The test for combining references is what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art. *In re McLaughlin*, 170 USPQ 209 (CCPA 1971). References are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures. *In re Bozek*, 163 USPQ 545 (CCPA 1969). In this case, the all references are directed to improving synthetic gemstones to make them look more real and more aesthetic. Therefore, since the references are trying to solve a similar problem it would have been obvious to use the tray taught by Gregory with the synthetic gemstones taught by Nassau et al if a superior tray with gem-like properties was sought. One would have been motivated by reasonable expectation of success because both inventions involve the creation of gem-like articles.

For the above reasons, it is believed that the rejections should be sustained.

Art Unit: 1772

Respectfully submitted,

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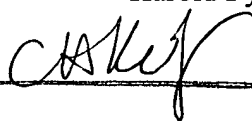
January 10, 2003

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1772